

5 **METHOD AND APPARATUS FOR**
PROTECTING AN ECHO CANCELLER AGAINST RANDOM TRANSITIONS
FROM LINEAR TO NON-LINEAR ECHO PATHS

10 **ABSTRACT OF THE DISCLOSURE**

A method and apparatus is capable of detecting the presence of a non-linear echo path as well as transitions from non-linear echo path to linear echo path and vice versa.

15 Additionally, when non-linear echo path is detected, the echo canceller (12) is configured to follow a prescribed logic routine that combats possible echo leak-through as a result of compromised cancellation due to non-linearity. This prescribed logic routine affords the echo canceller (12) protection against non-linear echo path by preserving an already converged state of the echo canceller (12) from possible divergence due to the occurrence of non- linearity in the echo path and thereby prevents echo leak-through that would occur due
20 to divergence of the echo canceller (12).

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